zebra mussel

Dreissena polymorpha

Kingdom:	Animalia
Division/Phylum:	Mollusca
Class:	Bivalvia

Features

The zebra mussel has a small, triangular shell with alternating light and dark bands. The inside of the shell is white. The zebra mussel grows to 1 1/2 inches long.

Natural History

The zebra mussel lives in lakes and rivers. This mussel attaches to nearly any hard, underwater surface by glue-like fibers called byssal threads. Areas with large numbers of these animals may have 30,000 to 70,000 zebra mussels per square meter. Zebra mussels attach to water intake pipes of power plants and water treatment plants. Millions of dollars are spent each year for cleanup and repair of these structures. Zebra mussels also attach to other mollusks, which may stop the native species from feeding or reproducing. The zebra mussel reproduces at an age of about one year. Each female may produce 30,000 to 1 million eggs per year. Breeding occurs from May through October. Males and females release eggs and sperm into the water. Fertilized eggs develop quickly into free-swimming larvae called veligers. Veligers form shells and, after about 10-15 days, settle on the bottom and attach to anything hard. Zebra mussels filter water to remove plankton for food. They are often found attached on native mussels near the incurrent siphon, the place where food is taken into the shell. Each zebra mussel may filter up to one liter of water per day. Filtering improves water clarity but reduces the amount of plankton available for native species. The zebra mussel is exotic to Iowa. It is native to the Caspian Sea region of Asia. Zebra mussels were brought to the Great Lakes from Europe in the ballast water of ships in 1986. They may be spread by livewells, bilge water, boats, and boating equipment.

Habitats

Mississippi River

Iowa Status

common; exotic

Iowa Range

Mississippi River

Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.